



1 of 23 QB

Page 1 of 1

Form PTO-1449 (Rev. 2-32) TRADE & MARK OFFICE U.S. Department of Commerce Patent and Trademark Office				Atty. Docket No. IMMR-0013D (034701-007)	Serial No. 10/780,852			
Information Disclosure Statement by Applicant (Use several sheets if necessary)				Applicant: Louis B. Rosenberg et al.				
				Filed: 02/19/2004	Group: 2628			
U.S. Patent Documents								
Init.		Document No.	Date	Name	Class	Subclass	Filing Date	
/JB/		4,689,449	08/25/1987	Rosen				
/JB/		4,758,692	07/19/1988	Roeser et al.				
/JB/		4,857,881	08/15/1989	Hayes				
/JB/		4,994,669	02/19/1991	Stern				
/JB/		5,223,776	06/29/1993	Radke et al.				
/JB/		5,228,356	07/20/1993	Chuang				
/JB/		5,436,640	07/25/1995	Reeves				
/JB/		5,589,828	12/31/1996	Armstrong				
/JB/		5,589,854	12/31/1996	Tsai				
/JB/		5,629,594	05/13/1997	Jacobus et al.				
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/JB/		5,731,804	3/24/1998	Rosenberg				
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/JB/		5,742,278	04/21/1998	Chen et al.				
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/JB/		5,805,140	09/08/1998	Rosenberg et al.				
/JB/		6,201,533	3/13/2001	Rosenberg et al.				
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/JB/		Millman, Paul A. et al., "Design of a Four Degree-of-Freedom Force-Reflecting Manipulandum with a Specified Force/Torque Workspace," Depart. Of Mechanical Engineering, 1991, pp. 1488-1493.						
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/JB/		Russo, Massimo Andrea, "The Design and Implementation of a Three Degree of Freedom Force Output Joystick," Dept. of Mechanical Engineering, MIT May 1990, 131 pages.						
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Examiner /Jeffery Brier/				Date Considered 09/24/2007				
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Form PTS 1449 (REvised 3/22)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. IMMR-0013D	Serial No. 10/780,852
Information Disclosure Statement by Applicant		Applicant: Louis B. Rosenberg et al.	
(Use several sheets if necessary)		Filed: February 19, 2004	Group: 2173

U.S. Patent Documents

Foreign Documents

Translation

Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)

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Atty. Docket No. IMMR-0013D

Serial No. 10/780,852

Information Disclosure Statement by Applicant

Applicant:
Louis B. Rosenberg et al.

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2173

U.S. Patent Documents

Foreign Documents

Translation

Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)

/JB/	A	Microsoft Sidewinder FF Wheel review, 1999, http://www.flgamers.com/f1/apanel/view_articles.php?id=4 .

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Information Disclosure Statement by Applicant **Applicant:**
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PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/780,852
				Filing Date	February 19, 2004
				First Named Inventor	Louis B. Rosenberg
				Art Unit	2173
				Examiner Name	Unassigned
Sheet	1	of	3	Attorney Docket Number	IMMR-050/04US

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/JB/		6,422,941	7/23/2002	Thorner et al.	
/JB/		6,160,489	12/12/2000	Perry et al.	
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/JB/		4,333,070	6/1/1982	Barnes	
/JB/		4,262,549	4/21/1981	Schwellenbach	
/JB/		4,127,752	11/28/1978	Lowthorp	
/JB/		2,972,140	2/14/1961	Hirsch	

Examiner Initials [*]	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)		
		JP	H2-185278		7/19/1990	Taito Corporation
		JP	H4-8381		1/13/1992	Epoch Co. and Key- Planning Co.
		JP	H7-24147		1/27/1995	Sega Corporation
		JP	H5-192449		8/3/1993	Taito Corporation

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¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Sheet	2	Filing Date	February 19, 2004
		First Named Inventor	Louis B. Rosenberg
		Art Unit	2173
		Examiner Name	Unassigned
		Attorney Docket Number	IMMR-050/04US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," <i>Master of Science Thesis</i> , MIT, Aug. 1990, archived Nov. 8, 1990.
		CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," <i>Bachelor of Science Thesis</i> , MIT, May 1983, archived June 23, 1983.
		WIKER, "Teletouch Display Development: Phase 1 Report," <i>Technical Report 1230</i> , Naval Ocean Systems Center, San Diego, July 1988.
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		JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," <i>Armstrong Aerospace Medical Research Laboratory, AAMRL-TR-90-039</i> , August, 1990.
		KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," <i>PRESENCE</i> , 4(4):387-402, Harvard Univ., 1995.
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		EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," <i>DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1</i> , ASME 1994.
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		"Cyberman Technical Specification," <i>Logitech Cyberman SWIFT Supplement to Logitech Mouse Technical Reference and Programming Guide</i> , 4/5/1994.
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		LAKE, "Cyberman from Logitech," at http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html , 1994.

Examiner Signature	Date Considered
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/780,852
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				Attorney Docket Number	IMMR-050/04US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		*Component Maintenance Manual With Illustrated Parts List, Coaxial Control Shaker Part no. C-25502," Safe Flight Instrument Corporation, Revised 28 January 2002 (3 pages).
		*Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part no. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).
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Examiner Signature	/Jeffery Brier/	Date Considered	09/24/2007
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

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Application Number	10/780,852
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First Named Inventor	Louis B. ROSENBERG
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/JB/		5,389,865	02-1995	Jacobus et al.	

Examiner
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/Jeffery Brier/

Date
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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Application Number	10/780,852
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First Named Inventor	Louis B. ROSENBERG
Art Unit	2173
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Attorney Docket Number	IMMR050/04US

U.S. PATENT DOCUMENTS

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/JB/		5,384,460	01-1995	Tseng	
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/JB/		5,351,692	10-1994	Dow et al.	
/JB/		5,286,203	02-1994	Fuller et al.	
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/JB/		5,243,266	09-1993	Kasagami et al.	
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/JB/		5,230,623	07-1993	Guthrie et al.	
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/JB/		5,131,844	07-1992	Marinaccio et al.	
/JB/		5,128,671	07-1992	Thomas, Jr.	
/JB/		5,126,948	06-1992	Mitchell et al.	
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/JB/		5,107,262	04-1992	Cadoz et al.	
/JB/		5,095,303	03-1992	Clark et al.	
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/JB/		5,088,046	02-1992	McMurtry et al.	
/JB/		5,076,517	12-1991	Ferranti et al.	

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/JB/		5,072,361	12-1991	Davies et al.	
/JB/		5,050,608	09-1991	Watanabe et al.	
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/JB/		4,677,355	06-1987	Baumann	

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Complete if Known

Application Number	10/780,852
Filing Date	February 19, 2004
First Named Inventor	Louis B. ROSENBERG
Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	IMMR050/04US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		Country Code ²	Number ³	Kind Code ⁴ (if known)		
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
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Sheet	7	of	8	First Named Inventor	Louis B. ROSENBERG
				Art Unit	2173
				Examiner Name	Unassigned
				Attorney Docket Number	IMMR050/04US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
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/JB/		Rosenberg, Louis B. et al., "Perceptual Decomposition of Virtual Haptic Surfaces," IEEE, Oct. 1993.
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/780,852
(use as many sheets as necessary)				Filing Date	February 19, 2004
Sheet	8	of	8	First Named Inventor	Louis B. ROSENBERG
				Art Unit	2173
				Examiner Name	Unassigned
				Attorney Docket Number	IMMR050/04US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
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				Filing Date	February 19, 2004
				First Named Inventor	Louis B. ROSENBERG
				Group Art Unit	
				Examiner Name	
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/JB/	4,879,556			Duimel	11/07/1989
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Sheet	5	of	8	Attorney Docket Number	IMMR-050/04US

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	PCT	WO9520788				08/03/1995	
	PCT	WO9532459				11/30/1995	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					T ²
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Sheet	6	of	8	Application Number	
				Filing Date	February 19, 2004
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